

### REMARKS

The presently claimed invention features isolated nucleic acid probes which hybridizes under stringent conditions to a variant human cytochrome P-450 (CYP3A4) gene having a T to C variance at nucleotide 732 and does not hybridize under stringent conditions to a human cytochrome P-450 (CYP3A4) gene having a T to C variance at nucleotide 732.

Such probes are useful for identifying which of the several alleles of the CYP3A4 is present in a patient.

#### Rejections Under 35 U.S.C. §101 and 35 U.S.C. §112 (first paragraph)

The Examiner rejected previously pending claims 17-26 as allegedly lacking utility. In a related rejection, the Examiner rejected previously pending claims 17-26 as allegedly not enabled.

The current claims are drawn to probes that are specific for a particular variance in the CYP3A4 gene. As the Examiner concedes, alterations in the CYP3A4 gene can influence drug metabolism. For this reason, it can be important to test a patient in order to determine which of the several known alleles of the CYP3A4 gene is present in the patient. This testing can entail direct testing for whether a particular variance is present. However, the testing can also be indirect. Thus, one can also analyze other portions of the gene to detect other variances that are linked to the variance that alters drug metabolism (haplotyping). Thus, allele specific probes are generally useful.

In view of the forgoing, Applicants respectfully request that the rejections under 35 U.S.C. §112, first paragraph and §101 be withdrawn.

#### Rejections Under 35 U.S.C. §112 (second paragraph)

The Examiner rejected previously pending claims 167-26 as allegedly indefinite. The Examiner stated that the claims were indefinite for using the term "binds selectively".

Applicants have cancelled the previously pending claims. The current pending claims are drawn to an isolated nucleic acid probe "comprising at least 15 nucleotides which hybridizes under stringent conditions to a variant human cytochrome P-450 (CYP3A4) gene having a T to C variance at nucleotide 732 and do not hybridize under stringent conditions to a human

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cytochrome P-450 (CYP3A4) gene not having a T to C variance at nucleotide 732." Thus, the claims do not include the phrase "binds selectively".

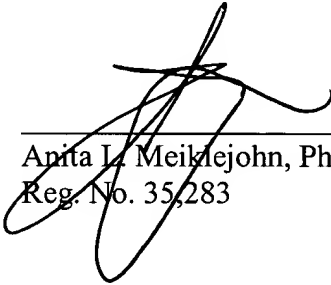
### CONCLUSION

Attached is a marked-up version of the changes being made by the current amendment.

Applicant asks that all claims be allowed. Enclosed is a \$460 check for the Petition for Extension of Time fee. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 2 DEC 2002

  
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**Version with markings to show changes made**

**In the claims:**

Claims 17-26 have been cancelled.